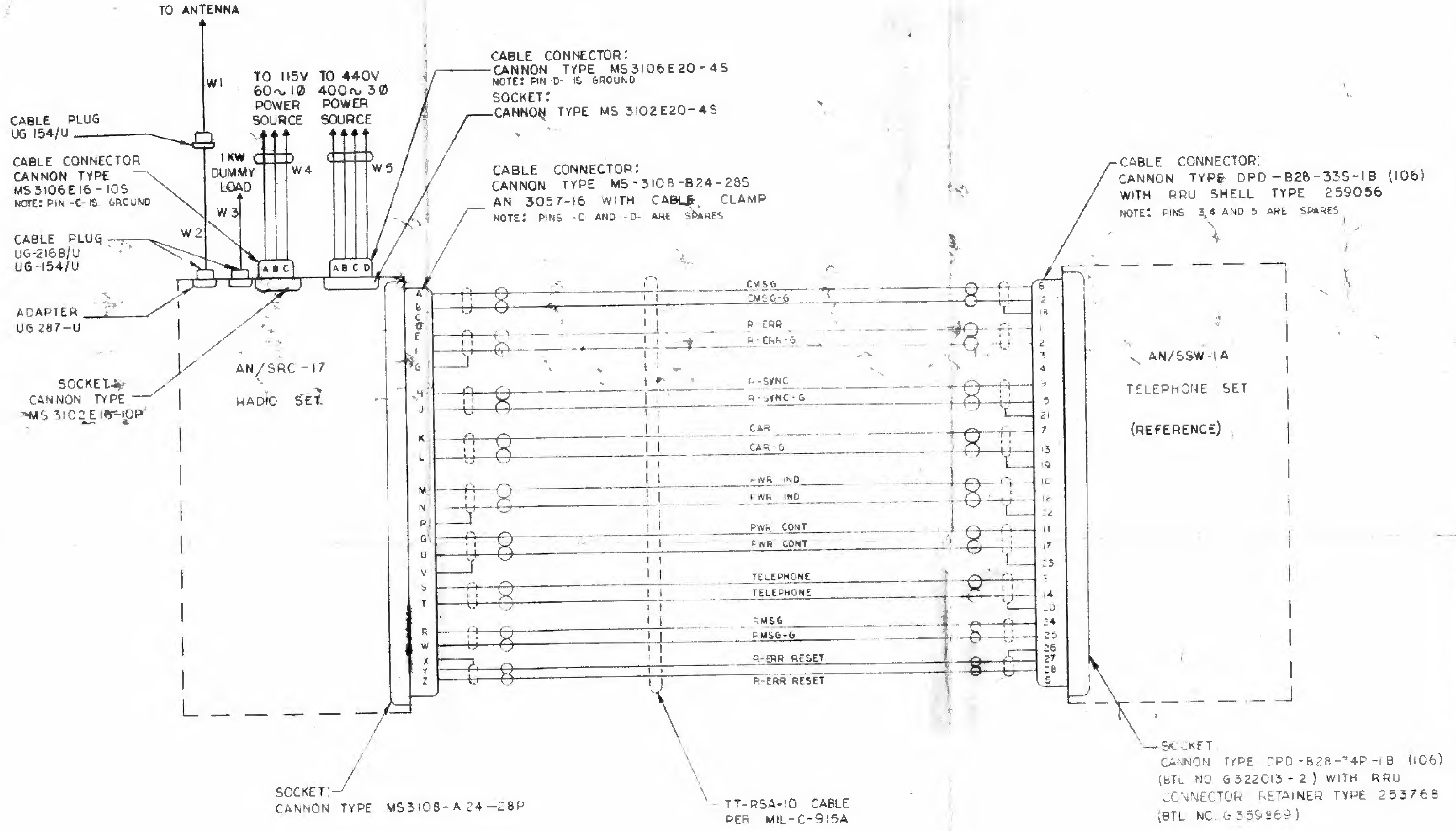
REVISIONS			
REV	DESCRIPTION	DATE	APPR


TO ANTENNA
W1
CABLE PLUG UG 154/U
TO 115V 60~1Ø POWER SOURCE
TO 440V 400~3Ø POWER SOURCE
1 KW DUMMY LOAD
W4
W5
W3
W2
CABLE CONNECTOR CANNON TYPE MS3106E16-10S
NOTE: PIN -C- IS GROUND
CABLE PLUG UG-216B/U UG-154/U
ADAPTER UG 287-U
SOCKET CANNON TYPE MS 3102E16-10P
AN/SRC-17 RADIO SET
A B C
A B C D
CABLE CONNECTOR: CANNON TYPE MS3106E20-4S
NOTE: PIN -D- IS GROUND
SOCKET: CANNON TYPE MS 3102E20-4S
CABLE CONNECTOR: CANNON TYPE MS-3108-B24-28S AN 3057-16 WITH CABLE CLAMP
NOTE: PINS -C- AND -D- ARE SPARES
A B C D E F G H J K L M N P G U V S T R W X Y Z
CMSG
CMSG-G
R-ERR
R-ERR-G
R-SYNC
R-SYNC-G
CAR
CAR-G
PWR IND
PWR IND
PWR CONT
PWR CONT
TELEPHONE
TELEPHONE
RMSG
RMSG-G
R-ERR RESET
R-ERR RESET
6 12 18 1 2 3 4 9 5 21 7 13 19 10 16 22 11 17 23 8 14 20 24 25 26 27 28 15
CABLE CONNECTOR: CANNON TYPE DPD-B28-33S-1B (106) WITH RRU SHELL TYPE 259056
NOTE: PINS 3,4 AND 5 ARE SPARES
AN/SSW-1A TELEPHONE SET (REFERENCE)
SOCKET: CANNON TYPE MS3108-A24-28P
TT-RSA-10 CABLE PER MIL-C-915A
SOCKET CANNON TYPE DPD-B28-34P-1B (106) (BTL NO G322013-2) WITH RRU CONNECTOR RETAINER TYPE 253768 (BTL NO. G359969)

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CAR -CARRIER CONTROL
CAR-G -CARRIER CONTROL GROUND
CMSG -CONTROL MESSAGE
CMSG-G -CONTROL MESSAGE GROUND
R-ERR -RADIO ERROR
R-ERR-G -RADIO ERROR GROUND
R-SYNC -RADIO SYNC
R-SYNC-G -RADIO SYNC GROUND
PWR-IND -RADIO AC POWER INDICATOR
PWR-CONT -RADIO AC POWER CONTROL
R-MSG -RADIO RECEIVED MESSAGE
R-MSG-G -RADIO RECEIVED MESSAGE GROUND
R-ERR RESET-RADIO ERROR RESET

SYMBOL	NUMBER COND	ACTIVE COND	NAVY TYPE NO.	
W1	COAX	1	RG-269/U	
W2	COAX	1	RG-17/U	
W3	COAX	1	RG-17A/U	
W4	3	2	16/3 TYPE S	
W5	4	3	16/4 TYPE S	

GENERAL NOTES:

1- ALL CABLES TO BE FURNISHED BY THE NAVY WITH THE EXCEPTION OFF CABLES W1, W2 AND W3, WHICH WILL BE SUPRLIED WITH AN/SRC-17 RADIO SET

REFERENCES		
NO	TITLE	DRAWING NO.
1	AN/SRC-17 RADIO SET OUTLINE	F-201-001-003
2	AN/SRC-17 RADIO SET SYSTEM DIAGRAM	D-201-001-005
3	PRIMARY POWER DISTRIBUTION	D-201-001-006
4	RUNNING SHEET FOR INTERCONN. CABLES	D-201-001-007

D-201-001-004

NAVY DEPARTMENT WASHINGTON D.C.

BUREAU OF SHIPS

INTERCONNECTING-CABLING DIAGRAM
AN/SRC-17 RADIO SET
CONTRACT NObsr 87289

EXAMINED	
OFFICIAL	SIGNATURE
OFFICER IN CHARGE	
HEAD ENGINEER	
ENGINEER	11/4/62
REVIEWED	
TRACED	
DRAWN	11-5-62

APPROVED DATE
FOR CHIEF OF BUREAU

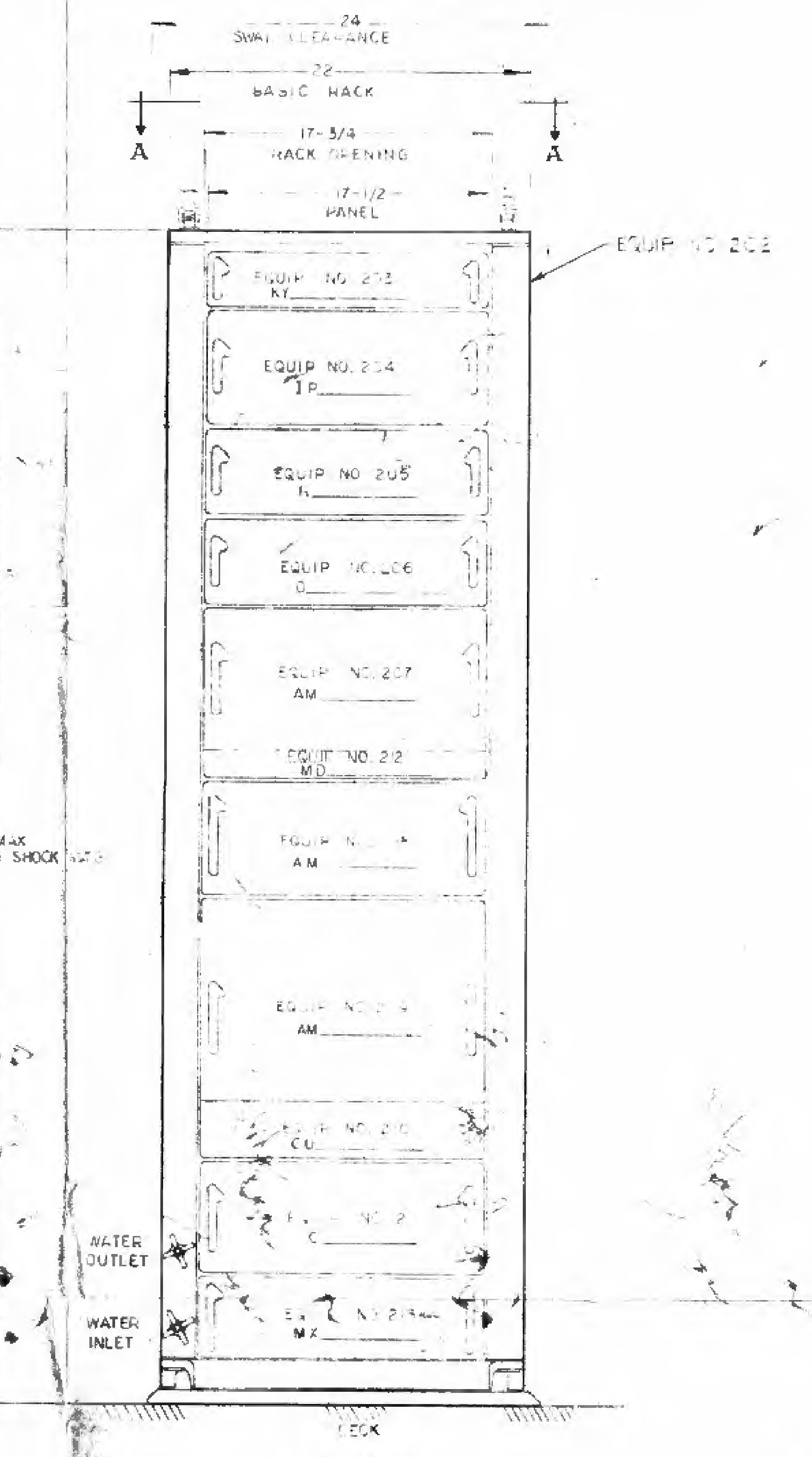
ELECTRONICS DRAWING NO. D REV

SCALE ~ SHEET 1 OF 1

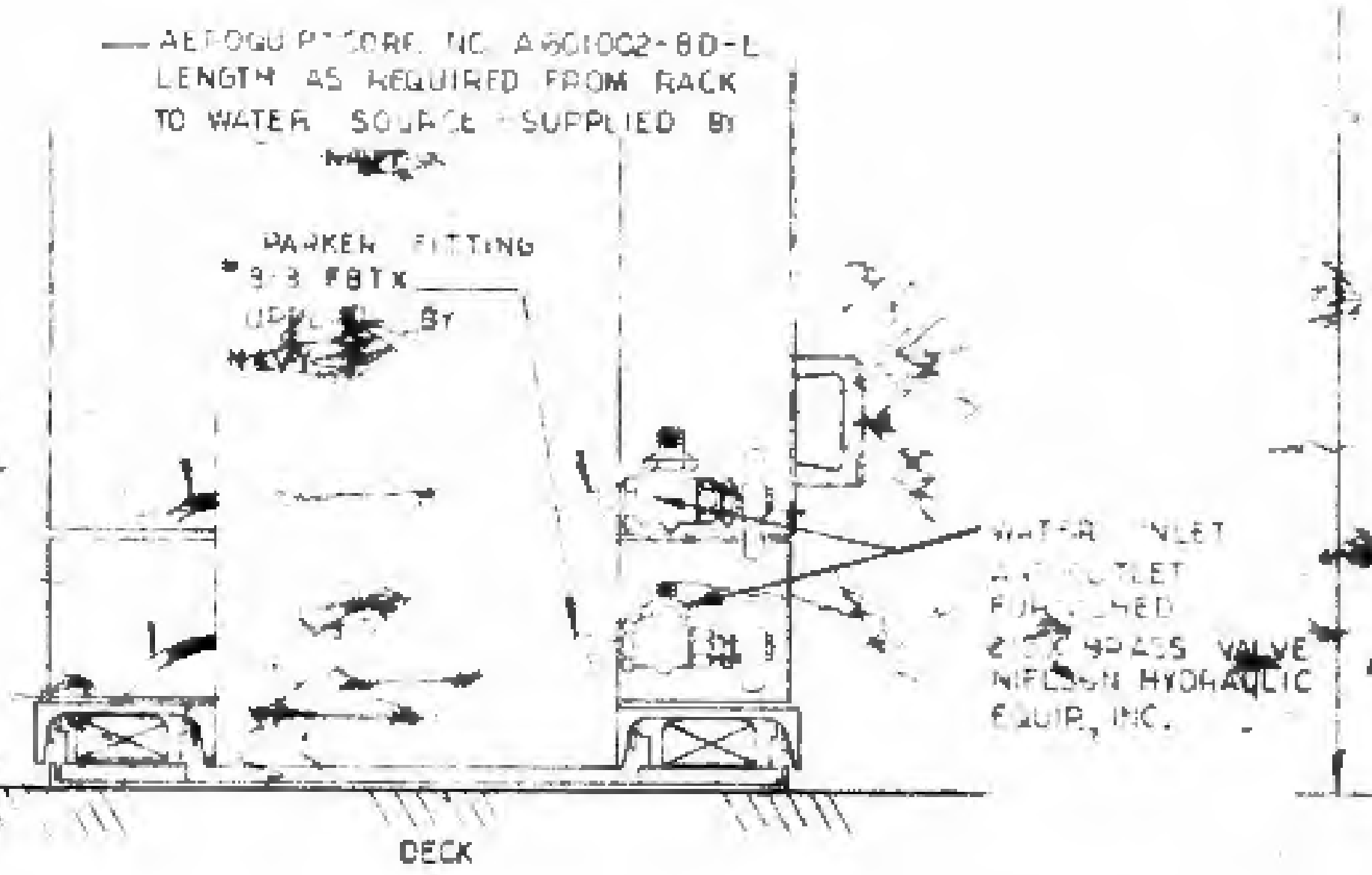
EQUIP NO. 201 AN/SRC-17 RADIO SET
EQUIP NO. 202 RACK
EQUIP NO. 203 - KEYER FREQ SHIFT
EQUIP NO. 204 - MONITOR, DIGITAL DATA
EQUIP NO. 205 - RECEIVER, RADIO
EQUIP NO. 206 - SYNTHESIZER, ELECTRICAL FREQ
EQUIP NO. 207 - AMPL-FREQ MULT 10 WATT
EQUIP NO. 212 - MODULATOR RADIO TRANS
EQUIP NO. 208 - AMPLIFIER, RADIO FREQ 100W
EQUIP NO. 209 - AMPLIFIER RADIO FREQ 1KW
EQUIP NO. 210 - DUPLEXER
EQUIP NO. 211 - CONTROL POWER SUPPLY
EQUIP NO. 213 - COOLER LIQUID ELECTRON TUBE

NOTE

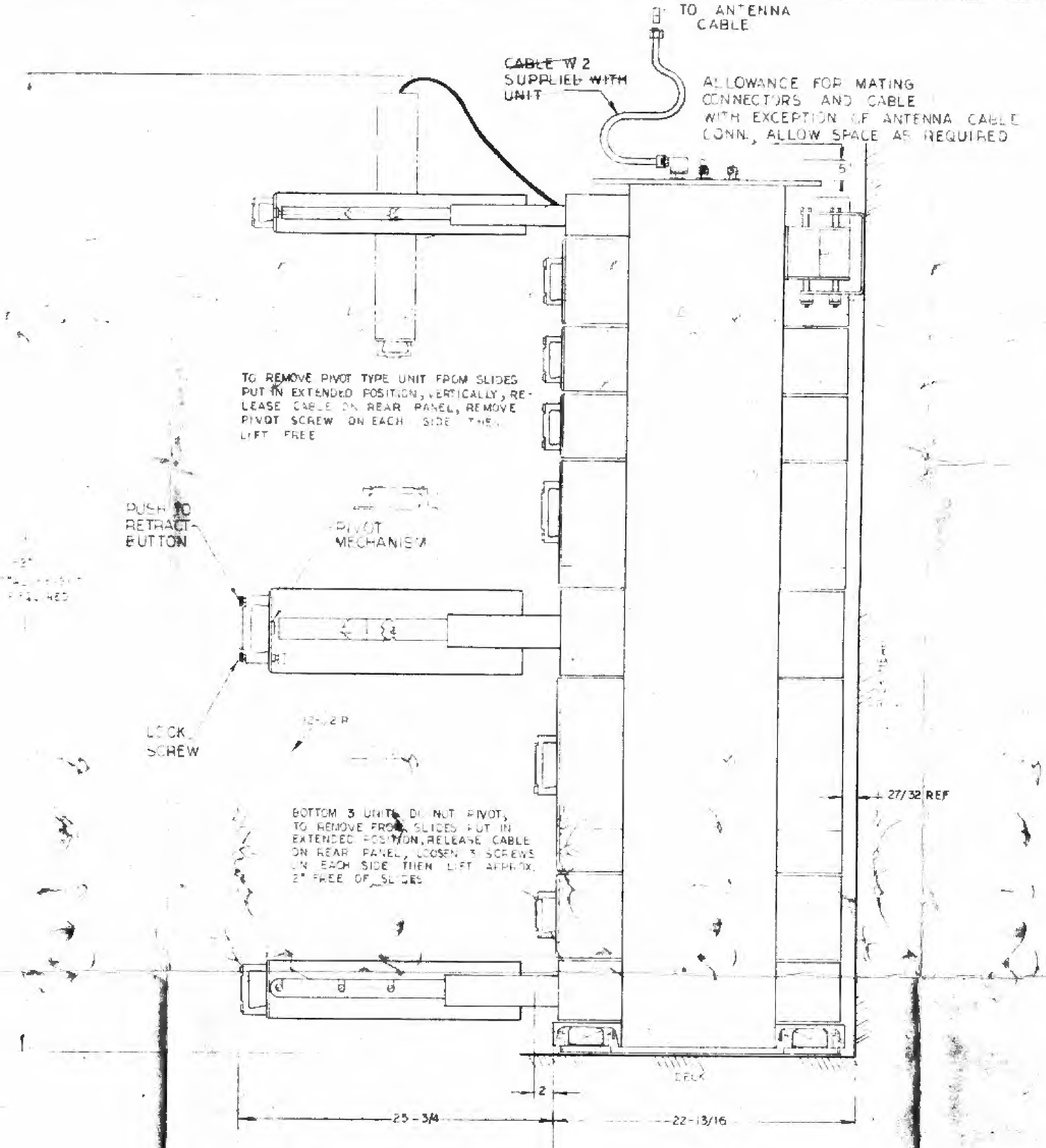
ALL OF THE INDIVIDUAL EQUIPMENTS IN THIS SYSTEM ARE SELF CONTAINED MODULES (HAVE THEIR OWN POWER SUPPLY AND COOLING SYSTEM) AND CAN BE USED FOR OTHER SUITABLE APPLICATIONS.
THE ONE EXCEPTION TO THE ABOVE IS THE MONITOR UNIT, EQUIP NO. 204 WHICH IS PECULIAR TO THIS SYSTEM BUT CONTAINS AN OSCILLOSCOPE AN/USM-117 MODIFIED WHICH CAN BE USED ELSEWHERE


24
SWAY CLEARANCE
22
BASIC RACK
17-3/4
RACK OPENING
17-1/2
PANEL
A
A
EQUIP NO. 202
EQUIP NO. 203
KY
EQUIP NO. 204
IP
EQUIP NO. 205
R
EQUIP NO. 206
O
EQUIP NO. 207
AM
EQUIP NO. 212
MD
AM
AM
EQUIP NO. 210
CU
C
MX
72 MAX
INCLUDING SHOCK
WATER OUTLET
WATER INLET
DECK

FRONT VIEW
SCALE-1:6


AEROQUIP HOSE NO. A601002-8D-L
LENGTH AS REQUIRED FROM RACK TO WATER SOURCE SUPPLIED BY NAVY
PARKER FITTING
8-8 FBTX
SUPPLIED BY NAVY
WATER INLET AND OUTLET FURNISHED
BRASS VALVE
NIELSON HYDRAULIC EQUIP, INC.
DECK

RECOMMENDED INSTALLATION OF WATER COOLING SYSTEM USING ABOVE LISTED ITEMS


TO ANTENNA CABLE
~~CABLE W 2 SUPPLIED WITH UNIT~~
ALLOWANCE FOR MATING CONNECTORS AND CABLE WITH EXCEPTION OF ANTENNA CABLE CONN., ALLOW SPACE AS REQUIRED
5
TO REMOVE PIVOT TYPE UNIT FROM SLIDES PUT IN EXTENDED POSITION, VERTICALLY, RELEASE CABLE ON REAR PANEL, REMOVE PIVOT SCREW ON EACH SIDE THEN LIFT FREE
PUSH TO RETRACT BUTTON
PIVOT MECHANISM
LOCK SCREW
BOTTOM 3 UNITS DO NOT PIVOT, TO REMOVE FROM SLIDES PUT IN EXTENDED POSITION, RELEASE CABLE ON REAR PANEL, LOOSEN 3 SCREWS ON EACH SIDE THEN LIFT APPROX. 2" FREE OF SLIDES
27/32 REF
2
25-3/4
22-13/16
DECK

42
MINIMUM AISLE SPACE REQUIRED

SIDE VIEW
SCALE-1:16

REV	DESCRIPTION	DATE	APPR

REVISIONS

NOTES

1- EQUIPMENT BUILT TO MIL-E-16400D
2- POWER REQUIREMENTS
I- 115V AC ±10% 50-400 CPS ±10% 1 PHASE
POWER CONSUMPTION - 1 KVA
II- 440V AC 10% 400 CPS ±10% 3 PHASE
POWER CONSUMPTION - 5 KVA
3- HEAT DISSIPATION
STANDBY CONDITION - 4 KW
OPERATING CONDITION 6 KW
4- COOLING SYSTEM
I- VENTILATION CAPACITY
(A) TOTAL CFM 250
(B) INTAKE THRU FILTERS ON FRONT PANEL
(C) EXHAUST - THRU REAR PANELS (ALLOW APPROX 3/4" CLEARANCE FROM REAR OF WALL TO BULKHEAD)
II- WATER REQUIREMENTS
(A) FLOW RATE - MIN. 1.5 GALLONS/MINUTE
(B) PURITY - DISTILLED WATER WITH MAX CONTAMINATION OF 0.65
~~(EQUIV OF SEA WATER)~~
(C) TEMPERATURE - MAX 35°C AT INPUT
MIN. ABOVE DEW POINT AT ALL TIMES
(D) PRESSURE - MAX. 100 LBS/SQ INCH GAUGE (INLET) MIN DIFF. 10 LBS
NORMAL PRESSURE INLET 50 PSIG NORMAL PRESSURE OUTLET 40 PSIG
5- TEMPERATURE
AMBIENT TEMPERATURE RANGE -0° TO +50°C
WEIGHT
ENTIRE UNIT WEIGHT 600 LBS
6- CABLE
I 115 V AC LINE (FROM POWER SOURCE)
(A) TYPE - 14/3 TYPE S (3 WIRE)
(B) CONNECTOR - MS 3106-[illegible] CABLE CONNECTOR
MS 3102-10[illegible] EQUIP CONNECTOR
(C) LENGTH - FROM SOURCE TO RACK (AS REQUIRED)
II- 440 V AC LINE (FROM POWER SOURCE)
(A) TYPE - [illegible]/4 TYPE S (4 WIRE)
(B) CONNECTOR MS 3106 E20-4 S CABLE CONNECTOR
MS 3102 E20-4 S EQUIP CONNECTOR
III- TERMINAL CABLE (FROM AN/SSW-1A)
(A) TYPE - TT-[illegible]A-10 (TEN TWISTED PAIR INDIVIDUALLY SHIELDED DIA .146 75 OHMS IMPEDANCE 28 PF/FT
(B) CONNECTOR - MS 3106-B24-28 S
(C) CLAMP - AN 3057-16
(D) LENGTH - FROM AN/SSW-1A TO RACK (AS REQ'D)(NOT TO EXCEED 600')
IV- LOAD CABLE (FROM 1 KW DUMMY LOAD)
(A) TYPE - RG 17
(B) CONNECTOR - UG 154-U CABLE CONNECTOR
UG 287 U EQUIP CONNECTOR
C LENGTH - AS REQUIRED FROM LOAD
V- ANTENNA CABLE -
(A) TYPE - RG 269
(B) CONNECTOR -
(C) LENGTH - AS REQUIRED FROM ANTENNA TO ~~RACK~~ (MAX LENGTH 150 FEET) - (OVER 150 FEET USE TYPE RG 270/U)
7- ALL EXTERNAL CABLING, WATER INLET AND OUTLET PIPING, MUST BE ABLE TO FLEX ONE INCH IN ANY DIRECTION TO ACCOMMODATE RACK MOVEMENT DURING SHOCK AND VIBRATION

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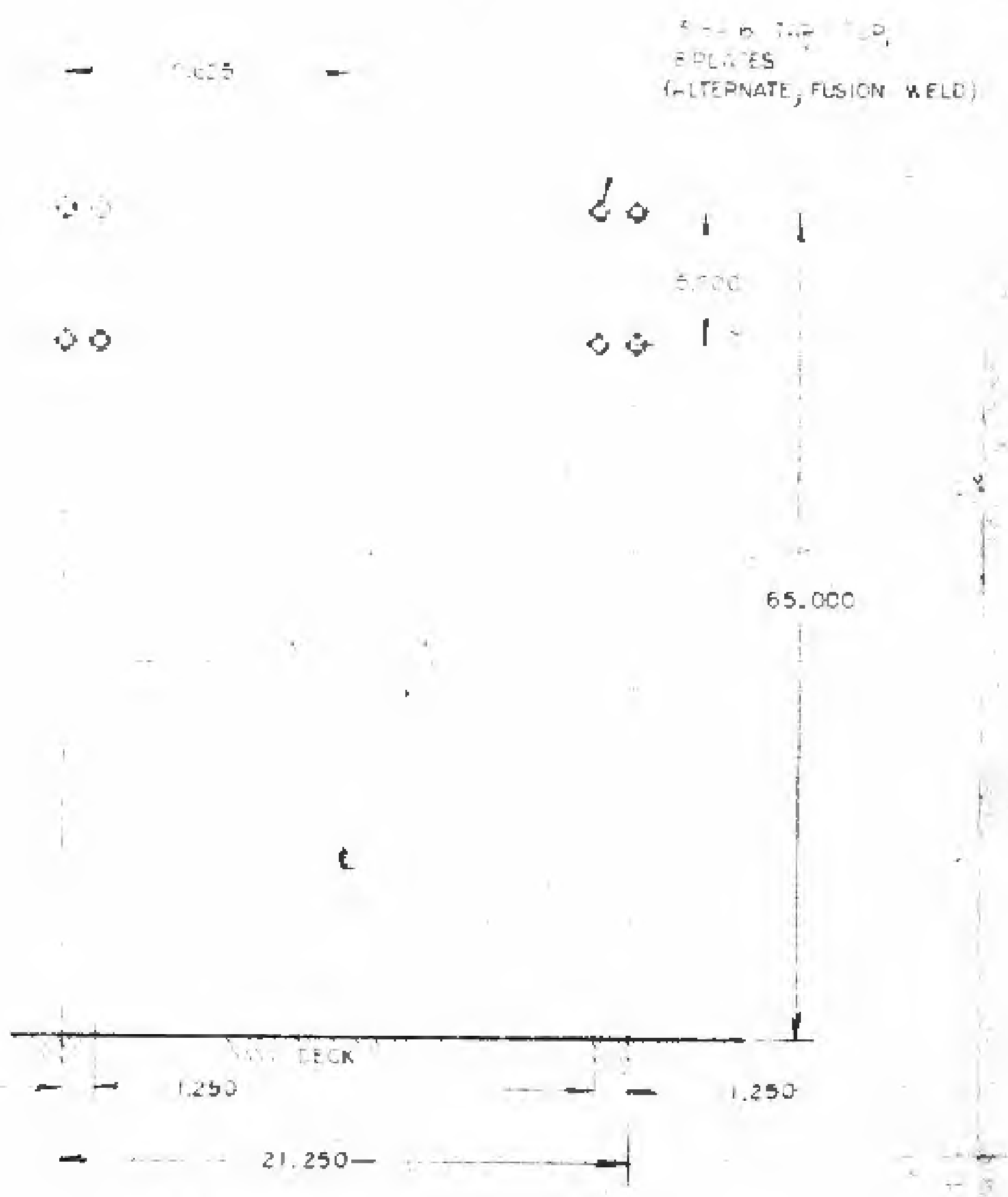
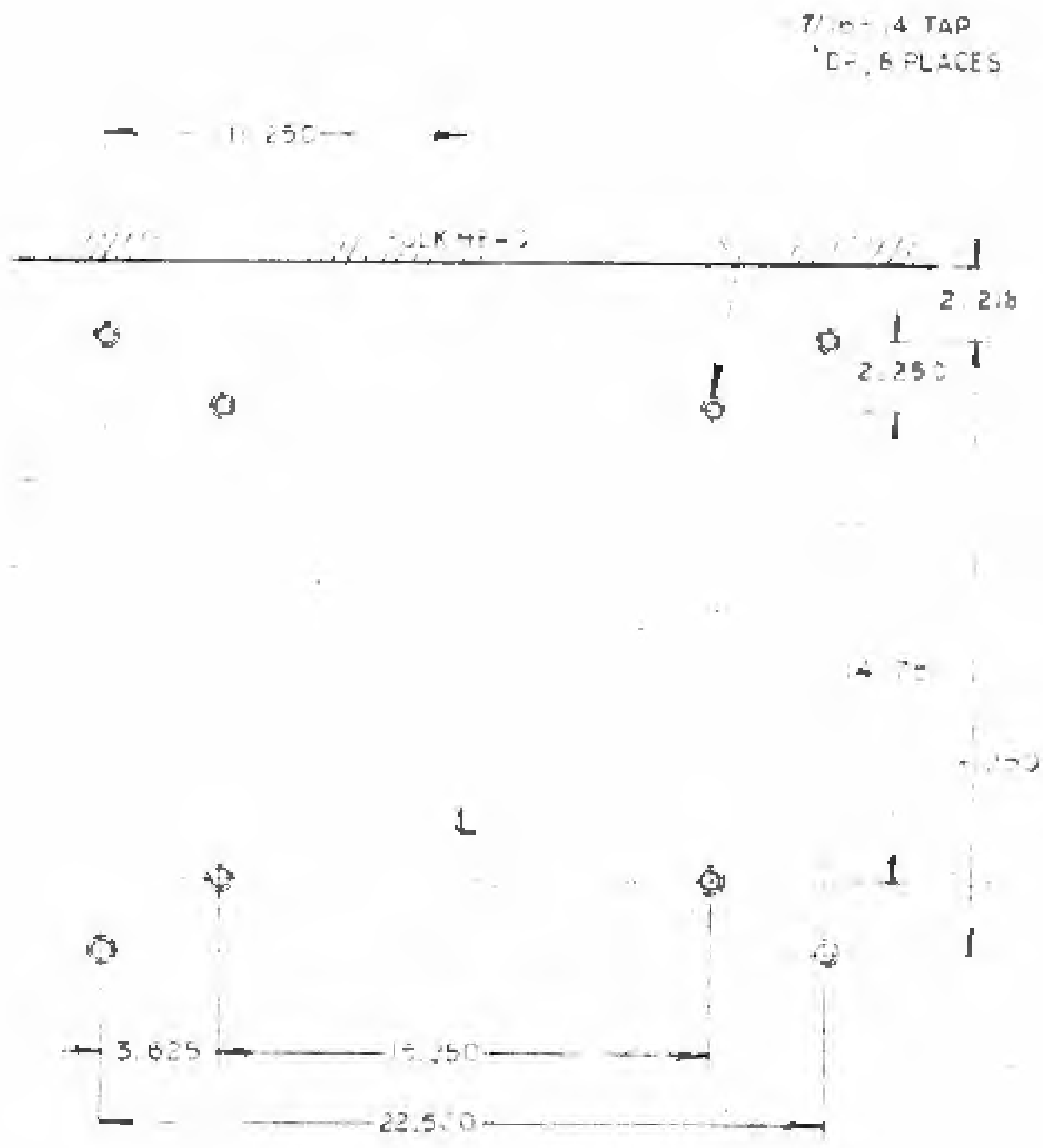
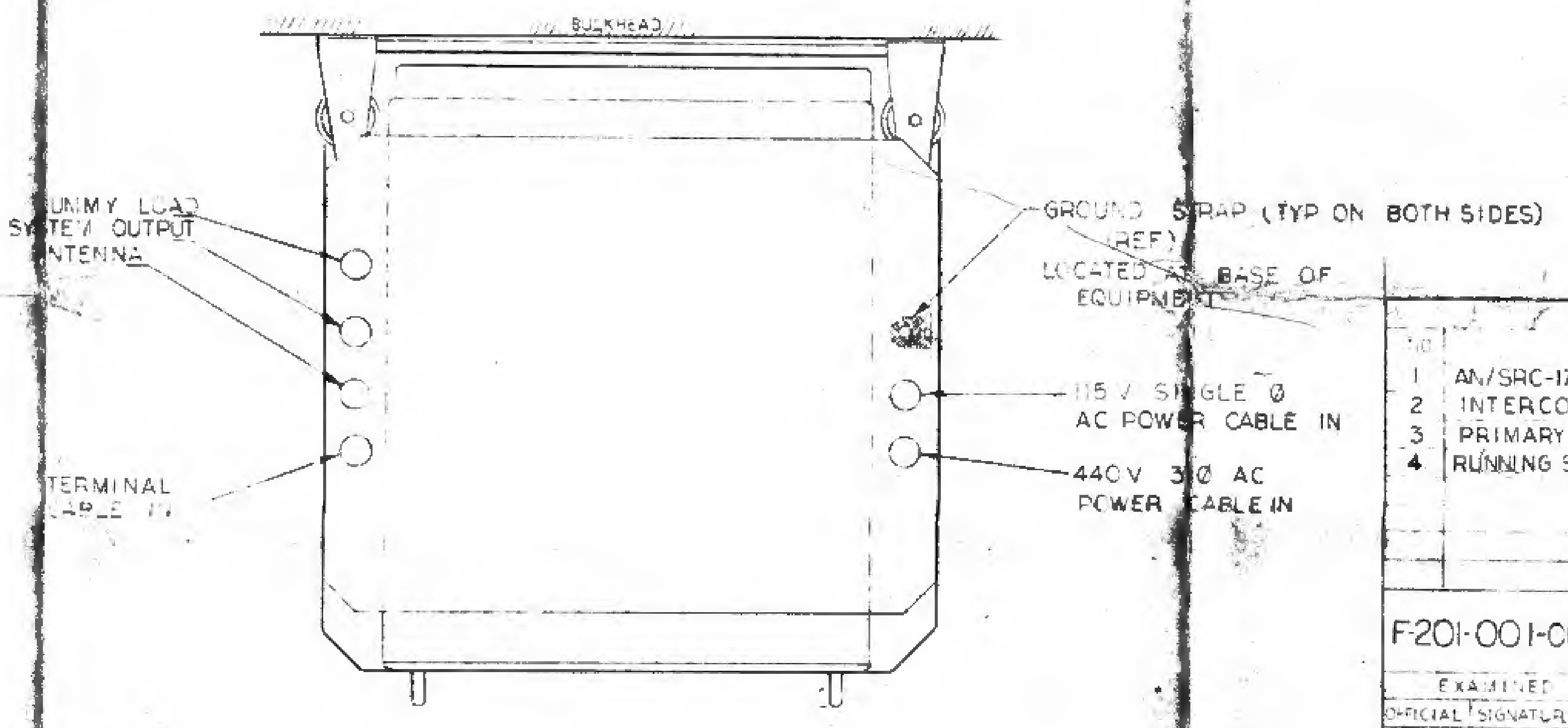
PRELIMINARY
H.L.M.


65.000
DECK
1.250
1.250
21.250

BULK HEAD MTG FOR STABILIZERS
SCALE: 1:5


7/16-14 TAP
8 PLACES
11.250
BULKHEAD
2.216
2.250
3.625
14.250
22.500

DECK MTG HOLES FOR SHOCKS
SCALE: 1:5


BULKHEAD
DUMMY LOAD
SYSTEM OUTPUT
ANTENNA
TERMINAL CABLE IN
GROUND STRAP (TYP ON BOTH SIDES)
(REF)
LOCATED AT BASE OF EQUIPMENT
115 V SINGLE Ø AC POWER CABLE IN
440 V 3 Ø AC POWER CABLE IN

VIEW A-A
TOP VIEW OF RACK
SCALE: 1:4

REFERENCES

NO	TITLE	DRAWING NO.
1	AN/SRC-17 RADIO SET SYSTEM DIAGRAM	D-201-001-005
2	INTERCONNECTING CABLING	D-201-001-004
3	PRIMARY POWER DISTRIBUTION	D-201-001-006
4	RUNNING SHEET FOR INTERCONN CABLES	D-201-001-007

F-201-001-003

NAVY DEPARTMENT WASHINGTON, D.C.
BUREAU OF SHIPS

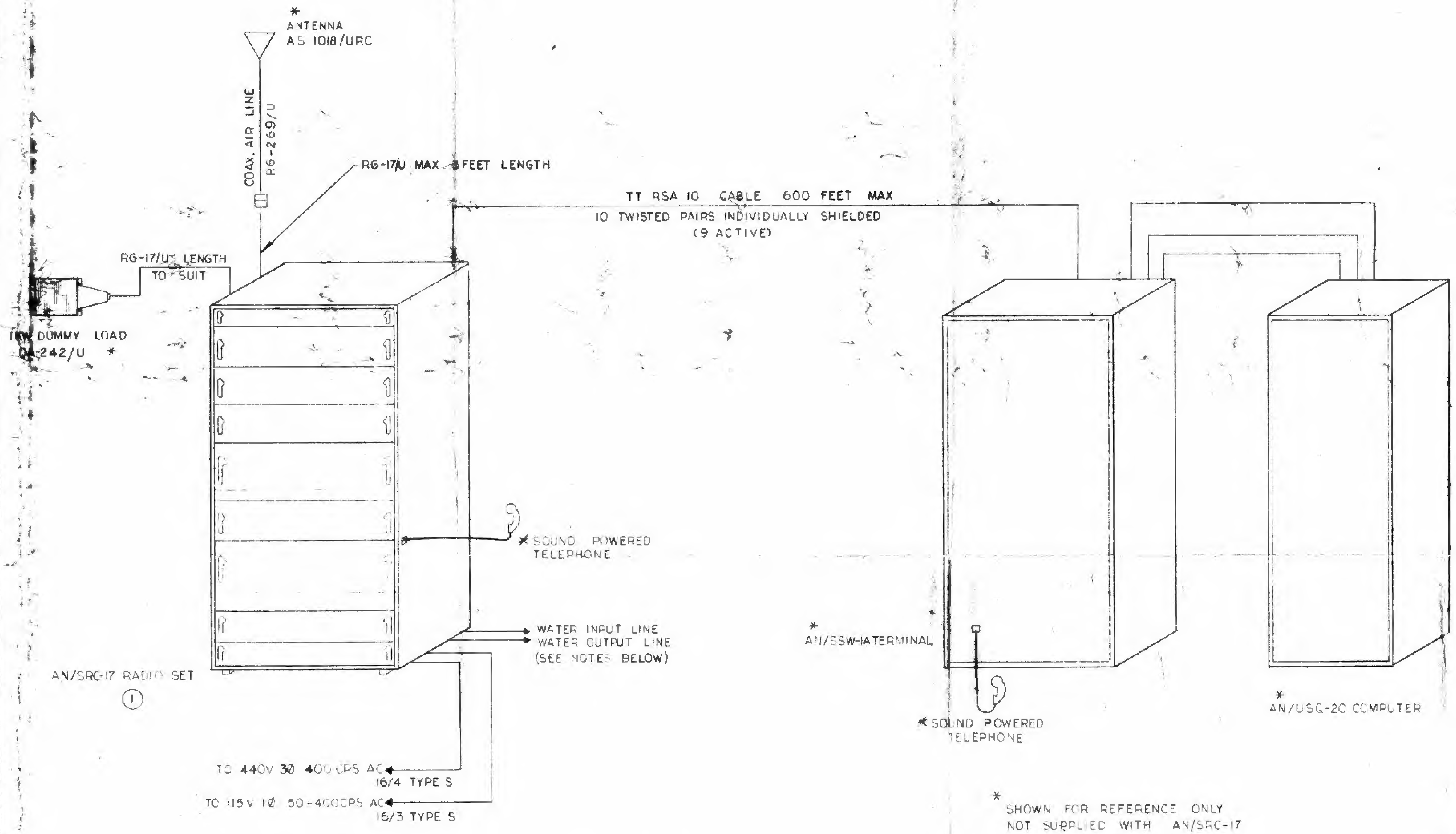
EXAMINED	
OFFICIAL	SIGNATURE
OFFICER IN CHARGE	
HEAD ENGINEER	
ENGINEER	
DESIGNED	
REVIEWED	
TRACED	
DRAWN	

OUTLINE
AN/SRC-17 RADIO SET
CONTRACT NO bsr 87289

APPROVED DATE
FOR CHIEF OF BUREAU
ELECTRONICS DRAWING NO. REV.
RE
SCALE SHEET 1 OF

REVISION

REV	DESCRIPTION	DATE	APPR


*
ANTENNA
AS 1018/URC
COAX. AIR LINE
R6-269/U
RG-17/U MAX 3 FEET LENGTH
RG-17/U LENGTH
TO SUIT
1KW DUMMY LOAD
DA-242/U *
TT RSA 10 CABLE 600 FEET MAX
10 TWISTED PAIRS INDIVIDUALLY SHIELDED
(9 ACTIVE)
* SOUND POWERED
TELEPHONE
WATER INPUT LINE
WATER OUTPUT LINE
(SEE NOTES BELOW)
AN/SRC-17 RADIO SET
①
*
AN/SSW-1A TERMINAL
* SOUND POWERED
TELEPHONE
*
AN/USG-2C COMPUTER
TO 440V 3Ø 400 CPS AC
16/4 TYPE S
TO 115V 1Ø 50-400CPS AC
16/3 TYPE S

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of 1/9/63
Return
H.L.H.

PRELIMINARY
COPY

* SHOWN FOR REFERENCE ONLY
NOT SUPPLIED WITH AN/SRC-17

POWER REQUIREMENTS (AS NOTED ABOVE)

ALLOWABLE VARIATION
VOLTAGE ± 10 %
FREQUENCY ± 5 %
POWER FACTOR 7 KVA 0.85 PF RUN
5 KVA STANDBY
30 VA SECURE
WATER REQUIREMENTS
INPUT AND OUTPUT LINE MIN
1/2" PIPE
FOR DETAILS SEE REF DWG. NO. F-201-001-003

TOTAL WEIGHT APPROX 800 LBS UNCRATED
APPROX 900 LBS CRATED
BOX -- 80" X 28" X 27" CUBICAL CONTENT 24 CU FT

VACUUM TUBE SUMMARY

2 X 7213
2 X 4CX250K
4 X 6816
2 X 7586
4 X 7587
1 X 5636

— NOTES —

1. KEEP CRATES IN UPRIGHT POSITION UNTIL UNPACKED
2. NOTE ARROW POINTING TO TOP ON CRATE
3. NOTE WEIGHT MARKED ON CRATE
4. DO NOT USE HAMMER OR PINCH BAR TO UNPACK - USE A NAIL PULLER

REFERENCES

NO	TITLE	DRAWING NO
1	AN/SRC-17 RADIO SET OUTLINE	F-201-001-003
2	INTERCONNECTING CABLING	D-201-001-004
3	PRIMARY POWER DISTRIBUTION	D-201-001-006
4	RUNNING SHEET - INTERCONN. CABLES	D-201-001-007
5		

D-201-001-005

NAVY DEPARTMENT WASHINGTON DC

BUREAU OF SHIPS

SYSTEM DIAGRAM
AN/SRC-17 RADIO SET
CONTRACT NObsr 87289

EXAMINED	
OFFICIAL	SIGNATURE
OFFICER IN CHARGE	
HEAD ENGINEER	
ENGINEER	
REVIEWED	
TRACED	
DRAWN	

APPROVED DATE
FOR CHIEF OF BUREAU

ELECTRONICS DRAWING NO			REV
	D		
SCALE —		SHEET 1 OF 1	